

| Monday, May 1, 2006 | | |
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| 07:45 – 08:45 am | Registration/Continental Breakfast | |
| 08:45 – 09:00 am | Welcome/Overview Week | Michael Zernic, NASA Glenn Research Center |
| Plenary Session – The Next Generation Air Transportation System: Building Upon the Foundation Session Chair: Karl Grundmann, JPDO Communications Director | | |
| 09:00 – 10:00 am | JPDO Progress and Plans | Robert Pearce, JPDO Director (Acting) |
| 10:00 – 10:30 am | BREAK | |
| 10:30 – 12:00 pm | Block to Block Operations Vision – The First Steps Operational Improvement Roadmap ADS-B Role in the Vision FAA SWIM Acquisition Planning | John Scardina, Director, JPDO Portfolio Management Division Rick Castaldo, Federal Aviation Administration Mike Hawthorne, Federal Aviation Administration |
| 12:00 – 01:00 pm | LUNCH | |
| Session A1 – Communication Technology Session Chair: Art Feinberg, Intelligent Automation, Inc. | | |
| 01:00 – 01:30 pm | Multi-Aircraft Airborne Networking Demonstration | Ralph Yost, Federal Aviation Administration, William J Hughes Technical Center |
| 01:30 – 02:00 pm | Qualification Challenges for Software Defined Radios | Michael Kocin, ViaSat, Inc. |
| 02:00 – 02:30 pm | Commercial Link 16 for ATC Application | Michael Kocin, ViaSat, Inc. |
| 02:30 – 03:00 pm | Technical and Operational Migration Concepts of a Broadband VHF Communication System (B-VHF) | Bernhard Haindl, Miodrag Sajatovic, Johannes Prinz, Frequentis; Michael Schnell, DLR and Carl-Herbert Rokitansky, UNISBG |
| 03:00 – 03:30 pm | BREAK | |
| 03:30 – 04:00 pm | Compatibility Analysis of Airport Wireless Local Area Networks and Satellite Feeder Links in the 5091-5150 MHz Band | Isabela Gheorghisor, Yan-Shek Hoh, and Frank Box, The MITRE Corporation |
| 04:00 – 04:30 pm | Laser Communications to Beam Optical Band to Distant Points | Belal Hamzeh and Mohsen Kavehrad, The Pennsylvania State University |
| 04:30 – 05:00 pm | Wireless Spacecraft Bus - A Radio Frequency Based Data Communication Architecture | Min Song, Sachin Shetty, Robert Ash and Kenneth Bone, Old Dominion University |
| 05:00 – 05:30 pm | Investigation of Operator Benefits from Reducing Horizontal Separations in North Atlantic Organized Track System | Almira Williams, CSSI, Inc. |
| 06:30 – 08:30 pm | DINNER & A MOVIE (Constellation Ballroom A) “Weather Forecast: Safer Skies Ahead (WINCOMM)” | |



| Monday, May 1, 2006 | | |
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| Session A2 – Navigation and Surveillance | | |
| Session Chair: Chris Daskalakis, DOT Volpe National Transportation Systems Center | | |
| 01:00 – 01:30 pm | Development of a Portable ADS-B Avionics Evaluation Tool | Randy Sleight, The John Hopkins University Applied Physics Laboratory |
| 01:30 – 02:00 pm | Analysis of Horizontal Position and Separation Accuracy of Automatic Dependent Surveillance - Broadcast and Radar Systems in Flight Tests with the Micro En Route Automated Radar Tracking System | Michael Castle, The John Hopkins University Applied Physics Laboratory |
| 02:00 – 02:30 pm | Enhanced ADS-B | Edward Valovage and Kenneth Samuelson, Sensis Corporation |
| 02:30 – 03:00 pm | System Wide ADS-B Back Up and Validation | Alex Smith, Rick Cassell, T. Breen, R. Hulstrom and Carl Evers, Rannoch Corporation |
| 03:00 – 03:30 pm | BREAK | |
| 03:30 – 04:00 pm | Sea Trial / LTE For ADS – B STIMS 21-22 | Dave McNamara, DCS Corporation |
| 04:00 – 04:30 pm | GPS/Galileo Performance Assessment for Aircraft Navigation and Approach | Helmut Blumenhofer, Thales ATM GmbH |
| 04:30 – 05:00 pm | (Airspace) Surveillance Transformation, Stovepipe to Service Oriented Architecture (SOA) | Christopher Smith and Charles Brown, Sensis Corporation |
| | Risk Sharing and Risk Mitigation in Global Navigation Satellite System Market (paper only) | Mariagrazia Spada, University of Roma “La Sapienza” |
| | Positioning and Navigation System Using GPS (paper only) | Jagannathan Parthasarathy, Sun Microsystems Pvt. Ltd |
| 06:30 – 08:30 pm | DINNER & A MOVIE (Constellation Ballroom A) “Weather Forecast: Safer Skies Ahead (WINCOMM)” | |
| Session A3 – Netcentric Operations and SWIM | | |
| Session Chair: Rafael Apaza, Federal Aviation Administration | | |
| 01:00 – 01:30 pm | The Federal Aviation Administration (FAA) System Wide Information Management (SWIM) Program | John Loynes, Federal Aviation Administration |
| 01:30 – 02:00 pm | Transforming the NAS Through System Wide Information Management and Network Enabled Operations | Chip Meserole, Boeing Company |
| 02:00 – 02:30 pm | Data Distribution and Access Techniques for FAA System Wide Information Management | Paul Comitz, Boeing Company |
| 02:30 – 03:00 pm | Enhanced Common Situational Awareness via SWIM-Based Applications | Jon Dehn and Sid Rudolph, Lockheed Martin Transportation & Security Solutions |
| 03:00 – 03:30 pm | BREAK | |
| 03:30 – 04:00 pm | Design, Architecture, the National Airspace System, System Wide Information Management, Network-Centric Operations, and Service-Oriented Architecture | Michael McGrady, Topia Technology |
| 04:00 – 04:30 pm | Aircraft Mobility Within an Internet Protocol-Based National Airspace System | Brian Haberman, The John Hopkins University Applied Physics Laboratory |
| 04:30 – 05:00 pm | Service Oriented Communication Architectures in Safety Critical Environments | Johannes Prinz , Wolfgang Kampichler, and Bernhard Haindl, Frequentis GmbH |
| | SWIM-SUIT: Proposal for a RP6 STREP on SWIM (moved to Session C1) | Massimiliano DeAngelis and S. Porfiri, Selex-Sistemi Integrati |
| 06:30 – 08:30 pm | DINNER & A MOVIE (Constellation Ballroom A) “Weather Forecast: Safer Skies Ahead (WINCOMM)” | |



| Tuesday, May 2, 2006 | | |
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| 07:30 – 08:30 am | Registration/Continental Breakfast | |
| Plenary Session – Future Communications Study Session Chairs: James Eck, Federal Aviation Administration and Mel Rees, Eurocontrol | | |
| 08:30 – 08:50 am | Future Communications Study Overview | Brent Phillips, Federal Aviation Administration and Jacky Pouzet, Eurocontrol |
| 08:50 – 09:10 am | Communication Operational Concept and Requirements | Gregg Anderson, Federal Aviation Administration |
| 09:10 – 09:30 am | Technology Evaluation Executive Summary | Glen Dyer, ITT Industries and Phil Platt, QinetiQ |
| 09:30 – 09:50 am | Future Communications Study: Roadmap Status | Dean Lamiano, The MITRE Corporation |
| 09:50 – 10:30 am | Joint U.S. and Eurocontrol Question and Answer Panel | All |
| 10:30 – 11:00 am | BREAK | |
| Session B1 – Future Communications Study Session Chairs: James Budinger, NASA Glenn Research Center and Jacky Pouzet, Eurocontrol | | |
| 11:00 – 11:30 am | Overview of Current Eurocontrol Communications Activities | Jacky Pouzet, Eurocontrol |
| 11:30 – 12:00 pm | Spectrum Issues and WRC 07 Preparation | Michael Biggs, Federal Aviation Administration |
| 12:00 – 01:00 pm | LUNCH | |
| 01:00 – 01:30 pm | FCS Evaluation Criteria for Technology Assessment | Tricia Gilbert, ITT Industries |
| 01:30 – 02:00 pm | Evaluation Process and Interim Results | Glen Dyer, ITT Industries |
| 02:00 – 02:30 pm | Development of Technology Shortlist for Future Investigations | Jacky Pouzet, Eurocontrol |
| 02:30 – 03:00 pm | Flexible Airborne Architecture | Phil Platt, QinetiQ |
| 03:00 – 03:30 pm | BREAK | |
| 03:30 – 04:00 pm | A Method for Estimating Future Air/Ground Data Loading | Brian Hung, The MITRE Corporation |
| 04:00 – 04:30 pm | L-Band Channel Modeling | Jason Berger, ITT Industries |
| 04:30 – 05:00 pm | L-Band Digital Link for Air Traffic Services Data Communications | Warren Wilson, The MITRE Corporation |
| 05:30 – 06:30 pm | BASEBALL SOCIAL IN HOTEL ATRIUM | |
| 07:05 pm | Baltimore Orioles vs. Toronto Blue Jays | |



| Tuesday, May 2, 2006 | | |
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| Session B2 – Airspace Safety and Security | | |
| Session Chair: Thomas Tanger, Ohio Aerospace Institute | | |
| 11:00 – 11:30 am | Enhancing Airspace Security in the Washington ADIZ | Scott Landriau, Patrick Markiewicz and John Zuna, Lockheed Martin Transportation & Security Solutions |
| 11:30 – 12:00 pm | Cyber Security Research Plans for a Secure Aircraft Data Network (SADN) | Kevin Harnett and Vince Rakauskas, Volpe National Transportation Systems Center |
| 12:00 – 01:00 pm | LUNCH | |
| 01:00 – 01:30 pm | Joint Network-Enabled Operations (NEO) Security Demonstration | Michael Lewis and Gene Hayman, Boeing Phantom Works |
| 01:30 – 02:00 pm | Maximizing Safety, Security and Efficiency within Multi-Layer Aviation Infrastructure Environments | Diptesh Patel, CMACS Global (cancelled) |
| 02:00 – 02:30 pm | Project SafeGuard | David Frostbutter, The John Hopkins University Applied Physics Laboratory and Brian Throop, Federal Aviation Administration (cancelled) |
| 02:30 – 03:00 pm | Air-to-Air Avionics Integration | Michael Harrison, Aviation Management Associates, Inc. |
| 03:00 – 03:30 pm | BREAK | |
| 03:30 – 04:00 pm | Impact of Weather to Cockpit Integration | James Tauss, Aviation Management Associates, Inc. |
| 04:00 – 04:30 pm | An Operational Evaluation of the Final Approach Runway Occupancy Signal | Kirk Swanson, Architecture Technology Corporation and Jaime Figueroa, Federal Aviation Administration |
| 04:30 – 05:00 pm | Simple Methodology for the Stochastic Independent Event Calculation of Air Traffic Conflicts | Seamus McGovern and Stephen Creaghan, Volpe National Transportation Systems Center |
| 05:00 – 05:30 pm | Tandem Optical Sensors to Assist in Runway Incursion Prevention | Seamus McGovern and Stephen Creaghan, Volpe National Transportation Systems Center |
| 05:30 – 06:30 pm | BASEBALL SOCIAL IN HOTEL ATRIUM | |
| 07:05 pm | Baltimore Orioles vs. Toronto Blue Jays | |



| Tuesday, May 2, 2006 | | |
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| Session B3 – Surface Systems and Architectures | | |
| Session Chair: Len Carlson, Technology Services Corporation | | |
| 11:00 – 11:30 am | Airport Surface Network Architecture Definition | Thanh Nguyen, Analex Corporation; Wesley Eddy, Verizon Federal Network Systems; Steven Bretmersky, Cleveland State University; Fran Lawas-Greodek and Brenda Ellis, NASA Glenn Research Center |
| 11:30 – 12:00 pm | An Experimental Airport Surface Wireless Network | Steven DeHart and Phillip Neumiller, Sensis Corporation |
| 12:00 – 01:00 pm | LUNCH | |
| 01:00 – 01:30 pm | Augmented and Virtual Reality Research for Tower Control at Airports | Marc Bourgois, EUROCONTROL Experimental Center |
| 01:30 – 02:00 pm | The Remote Airport Traffic Services Concept: Opportunities and Requirements | Chris Brinton and Stephen Atkins, Mosaic ATM |
| 02:00 – 02:30 pm | Use of Virtual Mission Operations Center Technology to Achieve JPDO's Virtual Tower Vision | William Ivancic, NASA Glenn Research Center |
| 02:30 – 03:00 pm | The Future of Terminal Airspace: An Airportal for 2025 | Mary Ellen Miller, Raytheon Company |
| 03:00 – 03:30 pm | BREAK | |
| 03:30 – 04:00 pm | Automated Arrival Traffic Flow Management Using 4D Trajectories | Dave Schleicher and Doug Sweet, Sensis Corporation |
| 04:00 – 04:30 pm | Research on Advanced Displays for Self-Separation and Sequencing at Non-Towered Airports | Keith Alter, Nav3D Corporation; Wallace Kelly, Blue Rock Research; Paul Snow, Mind's Eye Visualization and Louis Williams, RTI International |
| 04:30 – 05:00 pm | Wireless Channel Characterization: Modeling the 5 GHz Microwave Landing System Extension Band for Future Airport Surface Communications | David Matolak, I. Sen, W. Xiong, Ohio University; Rafael Apaza, Federal Aviation Administration and Lawrence Foore, NASA Glenn Research Center |
| 05:00 – 05:30 pm | An IEEE 802.11/802.16 Hybrid Terminal Area Networking for the Next-Generation National Airspace System | Jack Burbank and William Kasch, The John Hopkins University Applied Physics Laboratory |
| 05:30 – 06:30 pm | BASEBALL SOCIAL IN HOTEL ATRIUM | |
| 07:05 pm | Baltimore Orioles vs. Toronto Blue Jays | |



| Wednesday, May 3, 2006 | | |
|---|--|---|
| 07:00 – 08:00 am | Registration/Continental Breakfast | |
| Plenary Session – Performance-Based System Implementation Challenges Session Chair: David Hamrick, The MITRE Corporation | | |
| 08:00 – 08:30 am | RNP and RNAV Implementation | Jeff Williams, Federal Aviation Administration |
| 08:30 – 09:00 am | ADS-B Roadmap | Rick Castaldo, Federal Aviation Administration |
| 09:00 – 09:30 am | Quantitative Benefits of RNP/RNAV | Ralf Mayer, The MITRE Corporation |
| 09:30 – 10:00 am | Question and Answer Panel | All |
| 10:00 – 10:30 am | BREAK | |
| Session C1 – Aeronautical Information Services (AIS) Communication Session Chair: James Griner, NASA Glenn Research Center | | |
| 10:30 – 11:00 am | Flight Test Results of VDL-3, UAT, and 1090ES Datalinks for Weather Information Communication | James Griner, NASA Glenn Research Center |
| 11:00 – 11:30 am | Broadband Aircraft Communication Using a Mesh Network | William McNary, AeroSat |
| 11:30 – 12:00 pm | SWIM-SUIT: Proposal for a RP6 STREP on SWIM (moved from Session A3) | Massimiliano DeAngelis and S. Porfiri, Selex-Sistemi Integrati |
| 12:00 – 01:00 pm | LUNCH | |
| Session C2 – Future Global Policy Session Chair: Carey Fagan, Federal Aviation Administration | | |
| 01:00 – 01:30 pm | Shift the Current Air Traffic Management Paradigm: From Means to Objectives Management | Laurent Guichard and Sandrine Guibert, EUROCONTROL Experimental Center; Didier Dohy and Jean-Yves Grau, NeoSYS |
| 01:30 – 02:00 pm | Architecture & Requirements Development for the Next Generation Air Transportation System | Paul Mettus, Robert Avjian and Steven Rosen, Lockheed Martin Transportation & Security Solutions |
| 02:00 – 02:30 pm | CNS/ATM Planning: Modeling USAF and Civilian Air Traffic Interactions in European Airspace | Edward Wigfield, Kelly Connolly, Alexander Alshtein, James DeArmon, Richard Flourney, William Hershey, John James, Paula Mahoney, Jennifer Mathieu, John Maurer and Paul Ostwald, The MITRE Corporation |
| | A Free Transatlantic Aviation Market: Legal Regulatory Framework Concerning European Airspace System Needs to be Defined in Advance (paper only) | Mariagrazia Spada, University of Roma “La Sapienza” |
| 02:30 – 03:30 pm | BREAK | |
| Workshop Session 1 Session Chairs: Michael Gerry, Sensis Corporation and Rafael Apaza, Federal Aviation Administration | | |
| 03:30 – 05:00 pm | The NGATS-CNS National Testbed | |



| Wednesday, May 3, 2006 | | |
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| Session C3 – Integrated CNS Systems and Architectures | | |
| Session Chair: Kenneth Arkind, Raytheon | | |
| 10:30 – 11:00 am | Required Total System Performance: An Emerging Model-Based and Performance-Driven ATM/CNS Concept | Arek Shakarian, Boeing Phantom Works |
| 11:00 – 11:30 am | IPv6 Based Aircraft Data Networks and Voice Services | Nagaraja Thanthry, A. Bhatia, S. Shingvi and R. Pendse, Wichita State University |
| 11:30 – 12:00 pm | NGATS Dynamic Architecture | Ken Arkind, Raytheon Company |
| 12:00 – 01:00 pm | LUNCH | |
| 01:00 – 01:30 pm | Flight Trial Architectures Supporting Migration to Broadband Internet Protocol (IP) for Airline Operations Communications (AOC) and Air Traffic Services (ATS) Communications | Robert Mead, Boeing, Phantom Works; Karl Griep, Dave Morse, Mark Taylor and Duane Harkness, Avaliant LLC |
| 01:30 – 02:00 pm | Communications, Navigation, Surveillance and Avionics within the 2020 Future Vision | Robert Morgenstern, The MITRE Corporation |
| 02:00 – 02:30 pm | The Use of Collaborative Rerouting Procedures Instead of Miles-in-Trail (MIT) Restrictions for Managing National Airspace System (NAS) Choke Points | Paul Rigterink and Ed Ellenberger, Computer Sciences Corporation |
| 02:30 – 03:00 pm | Extended LAN Services and Aviation Data Networks | S. Kulkarni, Nagaraja Thanthry and R. Pendse, Wichita State University |
| 03:00 – 03:30 pm | BREAK | |
| Workshop Session 2 | | |
| Session Chairs: Robert Kerczewski, NASA Glenn Research Center and Tom Kraft, Federal Aviation Administration | | |
| 03:30 – 05:00 pm | The Future of Required Total System Performance (RTSP) | |



| Wednesday, May 3, 2006 | | |
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| Session C4 – CNS/ATM Simulation and Evaluation | | |
| Session Chair: Chris Wargo, Computer, Networks & Software Inc. | | |
| 10:30 – 11:00 am | Airspace Concept Evaluation System (ACES), Concept Simulations Using Communication, Navigation and Surveillance (CNS) System Models | Greg Kubat, Analex Corporation and Don Van Drei, NASA Glenn Research Center |
| 11:00 – 11:30 am | Communication, Navigation and Surveillance Models in ACES for Concept Developers | Greg Kubat, Analex Corporation; Don Van Drei, NASA Glenn Research Center; Goutam Satapathy, Intelligent Automation, Inc.; Anil Kumar, CNS, Inc. and Manu Khanna, Comptel, Inc. |
| 11:30 – 12:00 pm | Finding Optimum Air Service Distribution to Balance Network Load for Congestion Management | Loan Le, George Mason University |
| 12:00 – 01:00 pm | LUNCH | |
| 01:00 – 01:30 pm | NGATS CNS R&D Laboratory | Rod Collins and Robin Finnegan, Sensis Corporation |
| 01:30 – 02:00 pm | A Trajectory-Based Probabilistic TFM Evaluation Tool and Experiment | Kris Ramamoorthy and George Hunter, Sensis Corporation |
| 02:00 – 02:30 pm | Combined Weather-Impacted Traffic Index for Airports and its Correlation with Delay Metrics | Alexander Klein, George Mason University |
| 02:30 – 03:00 pm | Simulation - The Challenge for NGATS | Chris Wargo, Computer Networks & Software, Inc. |
| 03:00 – 03:30 pm | BREAK | |
| Workshop Session 3 | | |
| Session Chairs: Chris Wargo, Computer Networks & Software, Inc. and Jim Dieudonne, The MITRE Corporation | | |
| 03:30 – 05:00 pm | Network Enabled Information Access for NGATS | |

